|  | <u> </u>   |  | ATTORNEY'S DOCKET NO.: 052712            |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
|  | <u></u>  | PATENT AND TRADEMARK OFFICE              | DATE: June 16, 2005                      |  |  |  |  |  |
| TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371   |  |  |  |  |  |  |  |  |
| INTERN   | ATIONAL APPLICATION NO.:<br>PCT/JP2003/007577  | INTERNATIONAL FILING DATE: June 13, 2003 | PRIORITY DATE CLAIMED: December 16, 2002 |  |  |  |  |  |
| TITLE OF INVENTION: SEMICONDUCTOR MULTI-LAYERED STRUCTURE WITH NON-UNIFORM QUANTUM DOTS, AND LIGHT EMITTING DIODE, SEMICONDUCTOR LASER DIODE AND SEMICONDUCTOR LIGHT AMPLIFIER USING THE SAME AS WELL AS METHOD OF MAKING THEM |  |  |  |  |  |  |  |  |
| APPLICANT(S) FOR DO/EO/US: Yoshikazu TAKEDA et al.   |  |  |  |  |  |  |  |  |
| Applicant hereby submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:  |  |  |  |  |  |  |  |  |
| 1. <u>XX</u>   | X This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.   |  |  |  |  |  |  |  |
| 2  | This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.  |  |  |  |  |  |  |  |
| 3. <u>XX</u>   | This is an express request to begin national examination procedures (35 USC 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.   |  |  |  |  |  |  |  |
| 4. <u>XX</u>   | The US has been elected (Article 31).  |  |  |  |  |  |  |  |
| 5 <u>XX</u>  | A copy of the International Application as filed (35 U.S.C. 371(c)(2)):  a. is transmitted herewith (required only if not transmitted by the International Bureau).  b. XX has been transmitted by the International Bureau.  c. is not required, as the application was filed in the United States Receiving Office (RO/US)   |  |  |  |  |  |  |  |
| 6. <u>XX</u>   | An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).  a. XX is attached hereto. b. has been previously submitted under 35 U.S.C. 154(d)(4).  |  |  |  |  |  |  |  |
| 7. <u>XX</u>   | Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))  a. are transmitted herewith (required only if not transmitted by the International Bureau).  b. have been transmitted by the International Bureau.  c. have not been made; however, the time limit for making such amendments has NOT expired.  d. XX have not been made and will not be made. |  |  |  |  |  |  |  |
| 8  | An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).  |  |  |  |  |  |  |  |
| 9. <u>XX</u>   | An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).   |  |  |  |  |  |  |  |
| 10. <u>XX</u>  | An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).   |  |  |  |  |  |  |  |
| ITEMS 11. TO 20. BELOW CONCERN OTHER DOCUMENT(S) OR INFORMATION INCLUDED:  |  |  |  |  |  |  |  |  |
| 11. <u>XX</u>  | X An Information Disclosure Statement under 37 CFR 1.97 and 1.98 together with the international search report, PTO/SB/08 and 15 documents.  |  |  |  |  |  |  |  |
| 12. <u>XX</u>  | An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.  ASSIGNEE NAME AND ADDRESS: <u>JAPAN SCIENCE AND TECHNOLOGY AGENCY</u> , Kawaguchi-shi, Japan  |  |  |  |  |  |  |  |
| 13. <u>XX</u>  | Please publish the assignee data with the application.  A preliminary amendment.   |  |  |  |  |  |  |  |
| 14   | An Application Data Sheet under 37 C.F.R. 1.76   |  |  |  |  |  |  |  |
| 15 A substitute specification.   |  |  |  |  |  |  |  |  |
| 16 A change of power of attorney and/or address letter.  |  |  |  |  |  |  |  |  |
| 17 A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 C.F.R. 1.821 - 1.825.   |  |  |  |  |  |  |  |  |
| 18   | 18 A second copy of the published international application under 35 U.S.C. 154(d)(4).   |  |  |  |  |  |  |  |
| 19 A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).   |  |  |  |  |  |  |  |  |
| 20. XX Other items or information: 32 sheets of drawings and Form PCT/IB/306   |  |  |  |  |  |  |  |  |

| <del></del>   |  | INTERNATIONAL API              |                                       | ATTOR                | NEY'S DOCKET NO.: 052712 |  |  |  |
|---|--|--------------------------------|---------------------------------------|----------------------|--------------------------|--|--|--|
| U.S. APPLICATION  | 53963  | DATE: June 16, 2005            |                                       |                      |                          |  |  |  |
| 21. XX The followi  | ng fees are submitted  | CALCULATIONS                   | PTO USE ONLY                          |                      |                          |  |  |  |
| Basic Nati  | onal Stage Fee   | \$ 300.00                      |                                       |                      |                          |  |  |  |
|   | tage Search Fee  | \$ 500.00                      |                                       |                      |                          |  |  |  |
| 1   | tage Examination Fee   | \$ 200.00                      |                                       |                      |                          |  |  |  |
|   | EN'  | \$ 1,000.00                    |                                       |                      |                          |  |  |  |
| Surcharge of \$130.00   | ) for furnishing the o   |                                |                                       |                      |                          |  |  |  |
|   | rity date (37 CFR 1.49   |                                |                                       |                      |                          |  |  |  |
|   |  |                                |                                       |                      |                          |  |  |  |
| CLAIMS  | NUMBER<br>FILED  | NUMBER EXTRA                   | RATE                                  |                      |                          |  |  |  |
| TOTAL   | 32 -20 =   | 12                             | X \$ 50.00                            | \$ 600.00            |                          |  |  |  |
| INDEPENDENT   | 7 - 3 =  | 4                              | X \$ 200.00                           | \$ 800.00            |                          |  |  |  |
|   | laims(s) (if applicable CALCULATIONS =   |                                | + \$360.00                            | \$ 360.00            |                          |  |  |  |
|   |  |                                | t exceeds 100 sheets                  | \$ 2,76 <u>0</u> .00 |                          |  |  |  |
| National Stage Application Size Fee-for each additional 50 sheets that exceeds 100 sheets \$ 250.00.  Reduction by 1/2 for filing by small entity, if applicable. (Note 37 CFR 1.9, 1.27, 1.28).  |  |                                |                                       |                      |                          |  |  |  |
|   | ming by sman entity,   | ii applicable. (Note 37 Ci     | FK 1.9, 1.27, 1.28).                  |                      |                          |  |  |  |
| SUBTOTAL =  |  |                                |                                       | \$ 2,760.00          |                          |  |  |  |
|   | 30.00 for furnishing the riority date (37 CFR)   | e English translation later to | han 30 months from                    |                      |                          |  |  |  |
| TOTAL NATIONAL  |  | 1.492(1)). +                   |                                       | \$ 2,760.00          |                          |  |  |  |
|   | e enclosed assignmen   | 3 2,700.00                     |                                       |                      |                          |  |  |  |
|   | ppropriate cover shee  | \$ 40.00                       |                                       |                      |                          |  |  |  |
| TOTAL FEES ENCL   |  | \$ 2,800.00                    |                                       |                      |                          |  |  |  |
|   |  | Amount to be:                  | _                                     |                      |                          |  |  |  |
|   |  |                                | · · · · · · · · · · · · · · · · · · · | refunded<br>charged  | \$<br>\$                 |  |  |  |
| a. XX A check in the amount of \$ 2,800.00 to cover the above fees is enclosed. (\$300.00 for basic national stage fee; \$500.00 for national stage search fee; \$200.00 for national stage examination fee, \$800.00 for 4 additional independent claims; \$600.00 for 12 additional claims; \$360.00 for multiple dependent claims and \$40.00 for the assignment recordation fee). |  |                                |                                       |                      |                          |  |  |  |
|   | Please charge my Deposit Account No. 50-2866 in the amount of \$ to cover the above fees. (A duplicate copy of this sheet is enclosed.)                |                                |                                       |                      |                          |  |  |  |
|   | X The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-2866. |                                |                                       |                      |                          |  |  |  |
| NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed to request that the application be restored to pending status.  |  |                                |                                       |                      |                          |  |  |  |
| Send All Correspondence To:  WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 Connecticut Avenue, N.W. Suite 700 Washington, D.C. 20036 CUSTOMER No. 38834  Typed or Printed Name: Stephen G. Adrian  Reg. No.: 32,878  |  |                                |                                       |                      |                          |  |  |  |
| Signature   | Signature Date: June 16, 2005  |                                |                                       |                      |                          |  |  |  |

SGA/yap